

Entire set of Claims 17-35 as amended and in clean form pursuant to 37 C.F.R. § 1.121(c)(3)

17. A method of elevating the ratio of circulating HDL to circulating LDL, VLDL, or total cholesterol in a human or other animal comprising administering to the human or animal a DNA vaccine comprising a nucleotide sequence coding for an immunogenic polypeptide, which nucleotide sequence includes at least one segment coding for a B cell epitope of CETP linked in-frame with at least one segment coding for a broad range helper T cell epitope, which nucleotide sequence is operably linked to a promoter sequence suitable for directing the transcription of the nucleotide sequence in a mammalian cell.

18. The method according to claim 17 wherein said B cell epitope comprises a carboxyl terminal region of CETP involved in neutral lipid binding or neutral lipid transfer activity.

19. The method according to claim 17 wherein the broad range helper T cell epitope is selected from the group consisting of T cell epitopes of tetanus toxoid, diphtheria toxin, pertussis vaccine, Bacille Calmette-Guerin (BCG), polio vaccine, measles vaccine, mumps vaccine, rubella vaccine, purified protein derivative of tuberculin, and keyhole limpet hemocyanin.

20. The method according to claim 17 wherein the immunogenic polypeptide comprises a B cell epitope from the C-terminal 26 amino acids of human CETP and a T cell epitope from tetanus toxoid.

21. The method according to claim 20 wherein the immunogenic peptide comprises two B cell epitopes of human CETP.

22. A method of decreasing the level of endogenous CETP activity in a human or other animal comprising administering to the human or animal a DNA vaccine comprising a nucleotide sequence coding for an immunogenic polypeptide, which nucleotide sequence includes at least one segment coding for a B cell epitope of CETP linked in-frame with at least

one segment coding for a broad range helper T cell epitope, which nucleotide sequence is operably linked to a promoter sequence suitable for directing the transcription of the nucleotide sequence in a mammalian cell.

23. The method according to claim 22 wherein said B cell epitope comprises a carboxyl terminal region of CETP involved in neutral lipid binding or neutral lipid transfer activity.

24. The method according to claim 22 wherein the broad range helper T cell epitope is selected from the group consisting of T cell epitopes of tetanus toxoid, diphtheria toxin, pertussis vaccine, Bacille Calmette-Guerin (BCG), polio vaccine, measles vaccine, mumps vaccine, rubella vaccine, purified protein derivative of tuberculin, and keyhole limpet hemocyanin.

25. The method according to claim 22 wherein the immunogenic polypeptide comprises a B cell epitope from the C-terminal 26 amino acids of human CETP and a T cell epitope from tetanus toxoid.

26. The method according to claim 25 wherein the immunogenic peptide comprises two B cell epitopes of human CETP.

27. A method for eliciting production of anti-CETP antibodies in a human or animal comprising administering a DNA vaccine comprising a nucleotide sequence coding for an immunogenic polypeptide, which nucleotide sequence includes at least one segment coding for a B cell epitope of CETP linked in-frame with at least one segment coding for a broad range helper T cell epitope, which nucleotide sequence is operably linked to a promoter sequence suitable for directing the transcription of the nucleotide sequence in a mammalian cell.

28. A method of increasing the level of circulating HDL in a human or animal comprising administering to the human or animal a DNA vaccine comprising a nucleotide sequence coding for an immunogenic polypeptide, which nucleotide sequence includes at least

34. The method according to claim 31, wherein the DNA nucleotide sequence coding for an immunogenic polypeptide comprises the DNA sequence of nucleotides 1045 through 1101 of SEQ ID NO:3 and the DNA sequence of nucleotides 1387 through 1425 of SEQ ID NO:3.

35. The method according to claim 31, wherein the DNA nucleotide sequence coding for an immunogenic polypeptide comprises the DNA sequence of nucleotides 1045 through 1101 of SEQ ID NO:3 and the DNA sequence of nucleotides 1381 through 1428 of SEQ ID NO:3.